**Exercise 2: Verifying Interactions**

**Scenario:**

You need to ensure that a method is called with specific arguments

**Source Code:**

**ExternalApi.java**

**package** com.example;

**public** **interface** ExternalApi {

String getData();

}

**MyService.java**

**package** com.example;

**public** **class** MyService {

**private** **final** ExternalApi api;

**public** MyService(ExternalApi api) {

**this**.api = api;

}

**public** String fetchData() {

**return** api.getData();

}

}

**MyServiceTest.java**

**package** com.example;

**import** org.junit.jupiter.api.Test;

**import** **static** org.mockito.Mockito.\*;

**import** **static** org.junit.jupiter.api.Assertions.\*;

**class** MyServiceTest {

@Test

**void** testVerifyInteractionAndPrint() {

ExternalApi mockApi = *mock*(ExternalApi.**class**);

*when*(mockApi.getData()).thenReturn("stub response");

MyService service = **new** MyService(mockApi);

String result = service.fetchData();

System.***out***.println("\*\*\* VERIFICATION START \*\*\*");

System.***out***.println("fetchData() returned : " + result);

*verify*(mockApi).getData();

System.***out***.println("getData() called? : VERIFIED");

*assertEquals*("stub response", result);

System.***out***.println("\*\*\* VERIFICATION END \*\*\*");

}

}

**Pom.xml**

<project xmlns="http://maven.apache.org/POM/4.0.0"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<groupId>com.example</groupId>

<artifactId>external-api-demo</artifactId>

<version>1.0-SNAPSHOT</version>

<properties>

<maven.compiler.release>21</maven.compiler.release>

</properties>

<dependencies>

<dependency>

<groupId>org.mockito</groupId>

<artifactId>mockito-core</artifactId>

<version>5.12.0</version>

<scope>test</scope>

</dependency>

<dependency>

<groupId>org.junit.jupiter</groupId>

<artifactId>junit-jupiter</artifactId>

<version>5.10.0</version>

<scope>test</scope>

</dependency>

</dependencies>

<build>

<plugins>

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-surefire-plugin</artifactId>

<version>3.1.2</version>

<configuration>

<argLine>

--sun-misc-unsafe-memory-access=allow

-Dnet.bytebuddy.experimental=true

-XX:+EnableDynamicAgentLoading

-Xshare:off

</argLine>

<printSummary>true</printSummary>

</configuration>

</plugin>

</plugins>

</build>

</project>

**Output:**

**A screenshot of a computer

AI-generated content may be incorrect.**

**A screenshot of a computer error message

AI-generated content may be incorrect.**